What is claimed is:

1. An apparatus for determining a degree of charge-up induced on a wafer by plasma comprising:

an electron beam generator that generates a beam of primary electrons and that repeatedly scans a predetermined region of a surface of the wafer with the beam of primary electrons;

a detector, separated from the surface of the wafer by a distance, that collects secondary electrons that are generated by reaction between the primary electron beam and the surface of the wafer and that are emitted from of the surface of the wafer; and

a determination unit that determines the degree of charge-up induced on the surface of the wafer by the plasma, based on a change in an amount of secondary electrons collected by the detector.

2. The apparatus of claim 1, wherein the electron beam generator repeatedly scans the predetermined region of the surface of the wafer with the primary electron beam in a form of a pulse and sequentially counts a number of scans.

3. The apparatus of claim 1, wherein the determination unit provides a sample graph showing the change in the amount of secondary electrons collected by the detector with respect to a number of scans of primary electrons as a graph of brightness proportionate to the amount of secondary electrons and determines the degree of charge-up by comparing a waveform of the sample graph to a waveform of a reference graph.

4. A method of determining the degree of charge-up induced on a wafer by plasma comprising;

scanning a predetermined region of a surface of the wafer repeatedly with a primary electron beam;

collecting secondary electrons that are generated by a reaction between the primary electron beam and the surface of the wafer and that are emitted from the surface of the wafer; and

determining the degree of charge-up induced at the surface of the wafer by the plasma, based on a change in a amount of collected secondary electrons.

5. The method of claim 4, wherein said scanning with the primary electron beam is repeated in a form of a pulse and a number of scans is sequentially counted.

6. The method of claim 4, wherein said determining the degree of charge-up comprises:

providing a sample graph which shows the change in the amount of collected secondary electrons with respect to a number of scans of primary electrons;

providing a reference graph which shows a change in an amount of secondary electrons detected in a standard state, where charge-up induced by primary electrons is removed, with respect to a number of scans of primary electrons; and

determining the degree of charge-up by comparing a waveform of the sample graph to a waveform of the reference graph.

7. The method of claim 6, wherein said determining the degree of charge-up comprises comparing a number of scans corresponding to a maximum peak point of the sample graph to a number of scans corresponding to a maximum peak point of the reference graph and quantizing the degree of charge-up based on a degree to which the number of scans of the maximum peak point of the sample graph is larger than the number of scans of the maximum peak point of the reference graph.

8. The method of claim 6, wherein said determining the degree of charge-up comprises comparing a maximum peak value of the sample graph with a maximum peak value of the reference graph and quantizing the degree of charge-up based on a degree to which the maximum peak value of the sample graph is smaller than the maximum peak value of the reference graph.

9. A method of determining whether a conductive layer of a wafer is exposed through a contact hole that is formed in an overlying insulating layer by a plasma process, comprising:

repeatedly scanning an inside of the contact hole with a beam of primary electrons;

collecting secondary electrons that are generated by a reaction between the primary electron beam and an inside surface of the contact hole and that are emitted from the contact hole; and

determining whether a surface of the conductive layer is exposed through the contact hole in the insulating layer pattern based on a change in an amount of collected secondary electrons.

10. The method of claim 9, wherein the conductive layer is a gate electrode having a gate insulating layer thereunder.

11. The method of claim 9, wherein said repeatedly scanning comprises sequentially repeating transmission of the primary electron beam in a form of a pulse and counting a number of scans.

12. The method of claim 9, wherein said determining comprises:

providing a sample graph which shows the change in the amount of collected secondary electrons with respect to a number of scans of primary electrons;

providing a reference graph which shows a change in the amount of secondary electrons detected in a standard state where the conductive layer is exposed with respect to a number of scans of primary electrons; and

determining whether the conductive layer is exposed by comparing a waveform of the sample graph to a waveform of the reference graph.

13. The method of claim 12, wherein said of determining whether the conductive layer is exposed by comparing comprises:

designating the conductive layer as exposed when the waveform of the sample graph overlaps the waveform of the reference graph; and

designating the conductive layer as not exposed when the waveform of the sample graph is separated from the waveform of the reference graph.

14. The method of claim 12, wherein said determining whether the conductive layer is exposed by comparing comprises designating the conductive layer as not exposed when the waveform of the sample graph is separated from the waveform of the reference graph in an upward direction when the number of scans of the primary electron beam is no more than 200.

15. A method of determining a degree of degradation of a gate insulating layer that is formed under a material layer of a wafer, after processing of the wafer with a plasma, comprising:

repeatedly scanning a predetermined region of the material layer with a beam of primary electrons;

collecting secondary electrons that are generated by a reaction between the beam of primary electrons and a surface of the material layer and that are emitted from the material layer; and

determining the degree of degradation of the gate insulating layer due to the plasma, based on a change in an amount of collected secondary electrons.

16. The method of claim 15, wherein said repeatedly scanning comprises sequentially repeating transmission of the beam of primary electrons in a form of a pulse and counting a number of scans.

17. The method of claim 15, wherein said determining the degree of degradation of the gate insulating layer comprises:

providing a sample graph which shows the change in the amount of collected secondary electrons with respect to a number of scans of primary electrons;

providing a reference graph which shows a change in the amount of secondary electrons detected in a standard state where the gate insulating layer is not degraded, with respect to a number of scans of primary electrons; and

determining the degree of degradation of the gate insulating layer by comparing a waveform of the reference graph to a waveform of the sample graph.

18. The method of claim 17, wherein said determining the degree of degradation comprises comparing a number of scans corresponding to a maximum peak point of the sample graph with a number of scans corresponding to a maximum peak point of the reference graph and quantizing the degree of degradation of the gate insulating layer based on a degree to which the number of scans of the maximum peak point of the sample graph is larger than the number of scans of the maximum peak point of the reference graph.

19. The method of claim 17, wherein said determining the degree of degradation comprises quantizing a degree to which a maximum peak value of the sample graph is smaller than a maximum peak value of the reference graph by comparing maximum peak values of the sample graph and the reference graph.

20. The method of claim 17, wherein said determining the degree of degradation comprises quantizing a degree to which a number of scans of the reference graph is smaller than a number of scans of the reference graph by comparing the number of scans where a peak value of the sample graph is reduced to 0 to a number of scans where a peak value of the reference graph is reduced to 0.